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(71) Applicant: SUMITOMO ELECTRIC IND LTD

(72) Inventor:
OGAKI YASUJI
MIZOGUCHI AKIRA
UENISHI NAOTA
UEMIYA TAKAFUMI
HATTORI YASUHIRO

(54) METHOD FOR GROWING ORGANIC CRYSTAL

(57) Abstract:

PURPOSE: To obtain an organic crystal free from reverse symmetry center and useful for nonlinear optical material for conversion of wavelength without carrying out molecular modification by growing an organic crystal by vacuum deposition on a desirable region of substrate surface in an electric field.

CONSTITUTION: An organic crystal, e.g. 4-dimethylamino-4'-nitrostilbene crystal is grown on a

desired region of the surface of a substrate such as KCl by vacuum deposition in an electric field. According to the method, the direction of dipole coincides with the direction of the outer electric field by the interaction between a dipole moment of each molecule released into vacuum and the outer electric field and each molecule reaches the surface of substrate in a state having uniformly arranged orientation, and in such a manner, the crystal is grown.

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